

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): An image processing apparatus comprising:

an entirety controlling unit connected to at least two units out of an image reading unit for reading an image data, an image memory control unit which controls an image memory so as to write/read the image data, an image processing unit which subjects the image data to an image processing ~~such as edition~~ and an image writing unit for writing the image data on a paper, wherein said entirety controlling unit controls processing between said units and transmission/reception of the image data between the units; and

a memory unit which previously stores a processing information on ~~the~~ a content of the image processing with respect to the image data[[;]],

wherein said entirety controlling unit reads a part of the processing information stored in said memory unit and stores the read information in a storage unit provided in said image processing unit[[;]], and

said image processing unit subjects the image data to the image processing based on the processing information stored in said storage unit.

Claim 2 (Currently Amended): The image processing apparatus according to claim 1, wherein said image processing unit ~~having~~ includes:

a processing information memory unit which stores the processing information which is referred to in subjecting the image data to the image processing; and

a processing information controlling unit which controls the transmission/reception of the processing information which is referred to in subjecting the image data to the image processing between said storage unit and said processing information memory unit.

Claim 3 (Currently Amended): The image processing apparatus according to claim [[4]]2, further comprising a processing period detecting unit which detects whether or not said image processing unit is subjecting the image data to the image processing;

wherein said processing information controlling unit transmits/receives the processing information which is referred to in subjecting the image data to the image processing between said storage unit and said processing information memory unit when said processing period detecting unit detects that said image processing unit is not subjecting the image data to the image processing.

Claim 4 (Original): The image processing apparatus according to claim 1, wherein the control performed by said entirety controlling unit is performed by an image processor which manages the entire image processing apparatus.

Claim 5 (Currently Amended): An image processing apparatus comprising:
an entirety controlling unit connected to at least two units out of an image reading unit for reading image data, an image memory control unit which controls an image memory so as to write/read the image data, an image processing unit which subjects the image data to an image processing ~~such as edition~~ and an image writing unit for writing the image data on a paper, wherein said entirety controlling unit controls processing between said units and transmission/reception of the image data between the units; and

a memory unit which previously stores processing information on ~~the~~ a content of the image processing with respect to the image data;

wherein said entirety controlling unit controls the processing information ~~in a freely stored manner~~ until the completion of the storage of the processing information ~~in~~ when

reading a part of the processing information stored in the memory unit to then store it in a storage unit contained inside the image processing unit; and

said image processing unit subjects the image data to the image processing based on the processing information stored in said storage unit.

Claim 6 (Currently Amended): The image processing apparatus according to claim 5, wherein said image processing unit ~~having~~ includes:

a processing information memory unit which stores the processing information which is referred to in subjecting the image data to the image processing; and

a processing information controlling unit which controls the transmission/reception of the processing information which is referred to in subjecting the image data to the image processing between said storage unit and said processing information memory unit.

Claim 7 (Currently Amended): The image processing apparatus according to Claim 6, further comprising a processing period detecting unit which detects whether or not said image processing unit is subjecting the image data to the image processing[[]],

wherein said processing information controlling unit transmits/receives the processing information which is referred to in subjecting the image data to the image data to the image processing between said storage unit and said processing information memory unit when said processing period detecting unit detects that said image processing unit is not subjecting the image data to the image processing.

Claim 8 (Original): The image processing apparatus according to claim 5, wherein the control performed by said entirety controlling unit is performed by an image processor which manages the entire image processing apparatus.

Claim 9 (Currently Amended): An image processing apparatus comprising:

an entirety controlling unit connected to at least two units out of an image reading unit for reading image data, an image memory control unit which controls an image memory so as to write/read the image data, an image processing unit which subjects the image data to an image processing ~~such as edition~~ and an image writing unit for writing the image data on a paper, wherein said entirety controlling unit controls processing between said units and transmission/reception of the image data between the units; and

a storage unit provided with said image processing unit, ~~which~~ wherein said storage unit stores a processing information on ~~the~~ a content of the image processing with respect to the image data;

wherein said image processing unit subjects the image data to the image processing based on the processing information stored in said storage unit; and

said entirety controlling unit controls the processing information ~~in a readable manner~~ until the completion of the reading of the processing information ~~in~~ when reading the processing information stored in said storage unit.

Claim 10 (Currently Amended): The image processing apparatus according to claim 9, wherein said image processing unit ~~having~~ includes:

a processing information memory unit which stores the processing information which is referred to in subjecting the image data to the image processing; and

a processing information controlling unit which controls the transmission/reception of the processing information which is referred to in subjecting the image data to the image processing between said storage unit and said processing information memory unit.

Claim 11 (Currently Amended): The image processing apparatus according to claim 10, further comprising a processing period detecting unit which detects whether or not said image processing unit is subjecting the image data to the image processing[[:]],

wherein said processing information controlling unit transmits/receives the processing information which is referred to in subjecting the image data to the image processing between said storage unit and said processing period detecting unit detects that said image processing unit is not subjecting the image data to the image processing.

Claim 12 (Original): The image processing apparatus according to claim 10, wherein the control performed by said entirety controlling unit is performed by an image processor which manages the entire image processing apparatus.

Claim 13 (Currently Amended): An image processing apparatus comprising:
an image processing unit which processes an image data, said image processing unit ~~having~~ including a storage unit;

at least one unit out of:

[[a))] an image reading unit which acquires the image data,

[[b))] an image memory control unit which controls an image memory so as to write/read the image data,

[[c))] an image writing unit which generates an image on a media based on the image data[[:]], and

a memory unit which previously stores information about how the image data is to be processed by said image processing unit; ~~and~~

a controlling unit which provides controls over the processing and flow of data between said image processing unit, said least one unit, and said memory unit[[:]], wherein

said entirety controlling unit reads a part or whole of the information stored in said memory unit and transfers the read information in said storage unit of said image processing unit; and
said image processing unit processes the image data based on the information stored in said storage unit.

Claim 14 (New): The image processing apparatus according to claim 1, wherein the image processing includes editing the image data.

Claim 15 (New): The image processing apparatus according to claim 5, wherein the image processing includes editing the image data.

Claim 16 (New): The image processing apparatus according to claim 9, wherein the image processing includes editing the image data.

Claim 17 (New): The image processing apparatus according to claim 13, wherein the image processing includes editing the image data.

IN THE DRAWINGS

The attached sheet of drawings includes changes to Fig. 21. This sheet, which includes Fig. 21, replaces the original sheet including Fig. 21.

Attachment: Replacement Sheet

REMARKS/ARGUMENTS

Favorable reconsideration of this application as presently amended and in light of the following discussion is respectfully requested.

Claims 1-17 are presently active; Claims 1-3, 5-7, 9-11 and 13 are amended and new Claims 14-17 are added by the present amendment.

In the outstanding Office Action, the drawings, specification and claims were objected to; Claims 5-12 were rejected under 35 U.S.C. § 112, second paragraph; Claims 1, 4, 5, 8, 9, 12 and 13 were rejected under 35 U.S.C. § 102(e) as anticipated by U.S. Patent No. 6,064,490 to Minamizawa; and Claims 2, 3, 6, 7, 10 and 11 were indicated as allowable if rewritten in independent form to include the limitations of the base claim and any intervening claims.

Applicants acknowledge with appreciation the indication of allowable subject matter in Claims 2, 3, 6, 7, 10 and 11. Further, applicants and applicants' representative gratefully acknowledge the courtesy of an interview with Examiner Singh and Supervisory Patent Examiner Williams on August 12, 2004. During the interview, rejections in the outstanding Office Action and differences between the claimed invention and references cited in the outstanding Office Action were discussed. The Examiners agreed with proposed claim amendments to overcome objections and rejections noted above and agreed to review this formal response in light of comments discussed during the interview and reiterated below. The agreed upon claim amendments are submitted herein.

Regarding the objection to the drawings, Figure 21 is designated by a "Background Art" legend, as suggested in the outstanding Office Action. Accordingly, it is respectfully requested that objection be withdrawn.

Further, regarding the objection to the specification, the specification is amended to correct a minor inconsistency, as suggested in the outstanding Office Action. Accordingly, it is respectfully requested that objection also be withdrawn.

In addition, regarding the objection to the claims, Claim 3 is amended to depend from Claim 2, as suggested in the outstanding Office Action. Accordingly, it is respectfully requested that objection also be withdrawn.

In addition, regarding the rejection of Claims 5-12 under 35 U.S.C. § 112, second paragraph, Claims 5 and 9 are amended to more clearly recite that an “entirety controlling unit controls the processing information until the completion . . .” in light of comments in the outstanding Office Action. Accordingly, it is respectfully requested that rejection be withdrawn.

Claims 1, 4, 5, 8, 9, 12 and 13 were rejected under 35 U.S.C. § 102(e) as anticipated by Minamizawa. Applicants respectfully traverse that rejection.

Claim 1 is directed to an image processing apparatus including, *inter alia*, an image processing unit which subjects the image data to an image processing. Independent Claims 5, 9 and 13 include a similar feature. The image processing includes editing the image data, as in new independent Claims 14-17.

In a non-limiting example, Figure 1 shows an image processing apparatus that includes an image processing unit 103. The image processing unit 103 performs a variety of image processing functions on image data, including, for example, shading, correcting, smoothing, and scaling.¹

As discussed during the interview, Minamizawa does not teach or suggest an image processing unit that performs image processing on image data. Further, applicants respectfully traverse the statement in the outstanding Office Action that Minamizawa at

¹ Specification at page 14, line 17, to page 15, line 13.

column 6, lines 14-15, and column 11, lines 25-29, describes “an image processing unit (which reads on RAM 33) which subjects the image data to image processing.” Applicants respectfully submit that Minamizawa describes a Random Access Memory 33 that “is used as a buffer memory for processing the printer data.”² In other words, the RAM 33 in Minamizawa is used to provide rate buffering of data when a speed of the printer is slower than a speed of input data, which is different than an image processing, as in the claimed invention. Further, applicants respectfully submit that Minamizawa does not teach or suggest any image processing performed on image data. Thus, it is respectfully submitted that Minamizawa does not teach or suggest “an image processing unit which subjects the image data to an image processing,” as in the independent claims.

Accordingly, it is respectfully submitted that independent claims 1, 5, 9 and 13, and claims depending therefrom, are allowable.

Consequently, in view of the present amendment and in light of the above discussions, the outstanding grounds for rejection are believed to have been overcome. The application as amended herewith is believed to be in condition for formal allowance. An early and favorable action to that effect is respectfully requested.

Respectfully submitted,

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² Minamizawa at column 6, lines 15-17.